

291 These 2 pieces were then seamed together from
281 front of sole as far up as ankle and also seamed
to each side of back piece. In front, from ankle
upward 2 side pieces were tied together with 2
sets of buckskin thongs; sometimes upper set of
thongs was wrapped around leg and tied either in
front or back. To make soles wear longer, melted
pitch from Digger pine smeared over outside of
soles (FP). Deerbone awl used to punch holes for
seams, which were stitched with sinew. Moccasins
made by men; worn by men, women in summer, "not
in rainy weather" (SM), when hunting, wood gathering,
piñon gathering, etc.; children also wore them if "going some place," but footgear
was not worn habitually or on short trips.

[314]
[412] Sandals (same name as moccasins) were made of
heavy buckskin sole to which a straight strip of
buckskin 3 in. wide, 8 in. long was sewed in
back (fig. 4; Mus. cat. no. 1-28227, 15-10638).
When worn, this buckskin flap was brought upward

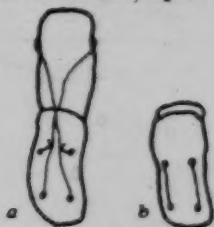


Fig. 4. Sandal. a, front view, showing strap arrangement; b, under side of sole, with strap.

to lie flat against back part of lower leg. Flap secured against leg by long buckskin thong, middle part of which held flap against lower leg. Ends of thong were brought forward on either side of leg, crossed in front over instep and threaded downward through 2 slits on each side of sole at instep; ends were then run up on under surface of sole to 2 holes underneath great and 4th toes and threaded up through these 2 holes. One end of thong passed between great and first toe, other between 3d and 4th toe; ends tied to upper sections of thong just below point where these were crossed over instep. Such sandals were used only when roasting piñons, to protect feet "when there was a hot fire to walk around" (SM). Fiber sandals never made, used.

292 Snowshoes not used, there being "not much snow
132 in the valley" where majority of semipermanent winter settlements were situated.

302 Coiffure.- Men wore hair long, loose (SM); sometimes parted it in middle and tied it in back (FP); never braided it. Women wore hair long, loose, parted, banded in front (Gayton, 1929, pl. 97a, b); hanging done by holding front hair out from forehead in bunch, burning ends off with glowing stick of *Atriplex canescens* James (ciw'wi-tbi-l). Woman's back hair sometimes braided, tied (FP wore hair thus; aboriginal?). When pounding acorns, otherwise employed in hot

SHELTER

342 Semipermanent dwelling house.- Thatch or tule mat-covered dwelling house (mohošt) was circular, dome-shaped, one-family house, about 8-10 ft. high at top of dome, some 20 ft. in diameter, although for large family dimensions enlarged. Floor for house was dug out about 6-12 in. (SM), or "not dug out at all" (FP); willow poles (u-'ut) from *Salix laevigata* Bebb. (ha-1), about 2 in. in diameter, were stuck in ground 3 ft. or so apart to form circle; tops of poles were bent inward and attached to round hoop (olo-igin) some 2 ft. in diameter which was fastened inside at top of dome, for smoke hole. Bands (u-mat) of willows 2 in. in diameter, spliced and tied with withes when necessary, were laid horizontally 1-2 ft. apart around frame of house. Armfuls of brush from *Chrysothamnus* sp. (ši-bapul) were piled over frame and secured by second series of bands; outside of structure then plastered with wet clay. Finally tule mats (paht) were laid over clay; mats secured by third series of bands.

Door (yihpal) of house faced E to catch morning sun (FM); door wicket-shaped, about 2 ft. wide, 4-4 1/2 ft. high; lower horizontal bandings on house stopped short on both sides of doorway. Tule mat hung over door; Tūbatulabal houses had

[71] no porchlike entrance way, such as Northfork Mono houses had (Gifford, 1932 b, pls. 2b, 3c), but were similar in structure to tule house of Owens Valley Paiute (Steward, 1935, pl. 3c).

• [372] Fire was built in shallow pit in center of house, immediately beneath smoke hole. Men procured willow poles and set up house frame, women gathered brush and tules, made tule mats. Mat-covered houses were "drier, and warmer" than plain brush and mud-covered houses, but "some people were too lazy to get tules" (SM, FP) so their houses lacked tule covering. Houses could be set up in single day; lasted 2-4 years (MM). In winter families cooked, ate, worked, and slept in these houses.

[221]

352 House furnishings scanty; tule mats were spread on floor; beds consisted of tule mats with cylindrical heap of earth piled up under one end of mat for pillow. Bearskin, deerskin, rabbitskin blankets used for coverings; in daytime sleeping mats and coverings rolled up, shoved against side of house out of way. Man and wife slept next to each other, feet toward fire; children slept on opposite side of house, in same position. Menstruating women stayed inside family living house or camp; did not occupy separate menstrual hut.

[841]

178 Most of Tūbatulabal now live during all or greater part of year in one-room frame shacks;

342 about 20-30 years ago they built rectangular

[221] gabled houses with partitions and fireplaces which were nonaboriginal in ground plan, but constructed from native materials. Cottonwood posts were used for uprights and roof beams; tules, doubled over series of horizontal willow

349 Men hunting deer in mts. camped in natural rock shelters (t'ing-i-l) under overhanging ledge of rock or beneath 2 huge boulders whose tops met gable-fashion.

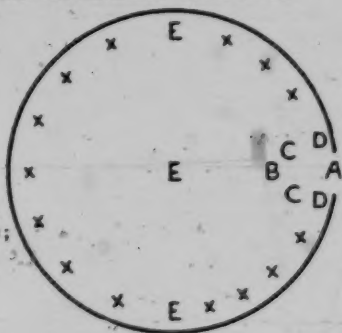
Women pounding meal, etc., at pit mortars on hot days piled up scrub oak or willows to height of 4-6 ft. around mortar bed, in order to have shade while working.

343 Sweat house. - Exterior of sweat house (mu-šaht) resembled that of Koso sweat house (Kroeber, Handbook, 590, pl. 56), save that door of Tübatulabal house was lower. Interior looked much like Serrano or Pass Cahuilla sweat house (Kroeber, Handbook, 596, pl. 60), according to SM.

343 To build sweat house, round hole some 4 ft. deep, 15 ft. wide excavated near stream or spring where artificial pool could be made. Three oak posts, 15 in. or so in diameter, 7-7 1/2 ft. high, forked at top, planted upright in straight line equidistant across pit. Ridgepole some 8 in. in diameter, 15 ft. long, set into forks of uprights. Series of smaller poles extended side by side from ridgepole to edge of pit on front, sides, back of house; these poles had bands laid down over them at 1-2-ft. intervals and brush of same variety as that used to cover houses piled on top of them, with dirt piled on top of brush. Door was in line with center upright and faced S; it was 3-3 1/2 ft. high, about 2 ft. wide, and was not hung with tule mats or any other covering because "then it would get too hot inside the sweat house" (SM). Sloping runway led from the door to floor of house. Small sweat houses with single upright pole never made (SM). "One man built sweat house; everyone used it" (SM).

343 Sweat houses heated by fire, which was made between door and middle upright; 2 firetenders (po-'anap'i-l) sat on each side of fire, each with his oak firewood piled up in back of him near the door. These 2 men alternated in feeding fire; sometimes they "fought" each other by blowing flames toward each other and making hissing noises after adding fresh fuel to fire. Bathers sat between 4-ft.-high dirt walls of house and uprights, in circle opposite fire, or "all around the house" if group large one (fig. 6). As many as 30 persons could be accommodated in house described.

Fig. 6. Diagram of seating arrangement in sweat house. A, entrance; B, fire; C, firetenders; D, firewood; E, upright supports; x, sweat bathers.



1: Voegelin E-5 (1931-1933) 1938
NS22 Tübatulabal NS22

482
#15 Conical pack basket. - Acorns, pifions, camp equipment, firewood transported by women in conical pack baskets (wo-niht); baskets carried well up over shoulders by means of pack strap (pongon), center of which passed across forehead or across chest (MM); 2 ends of strap were fastened to 2 buckskin loops set into basket. Basketry cap protected forehead. Conical carrying basket said never to have been used inside carrying net (SM, PN); RP, however, remembered having seen her grandmother carrying pack basket "in some sort of net."

482
● 372 Firewood, if not carried by women in pack basket, was tied into load with native rope and load, attached to rope which passed over chest, carried by women on back (FP, PN). Men sometimes packed home large pieces of firewood, carrying such over shoulder (SM).

483
#15 Carrying net. - Men used carrying net (tambahal) exclusively (SM), to pack home deer, other large game, also when trapping eagles; net, with burden inside, slung over one shoulder and passed downward across chest.

415
482 Basketry water bottle. - Water carried by men, women, in pitched basketry water bottles (iwat); such bottles also used for storing water at dwelling place. They were carried on back, by means of pack strap, ends of which were attached to 2 loops set into side of bottle, similar to loops on pack basket (supra). Small girls packed their own water in small pitched bottles, during trips over dry areas.

352
854 Baby carriers. - Two types of baby carriers used; babies, from time of birth up to about 5 months old, kept on small cradle (wodawilil), "just the size of a little baby." This cradle consisted of an oval frame, 21 in. or so long, with parallel rows of small willow sticks laid transversely across frame. Single oak branch, 1/2 in. in diameter, peeled, and 2 ends bound together with sinew or twine to form frame. Tules wrapped around edge of frame, and small tule mat (paht) put over transverse rods; cradle lacked hood. Infant lay on it, wrapped in soft tanned wildcat skin; when infant nursed, mother held cradle in crook of arm; carried child about in same manner. No specimen of such cradle obtained, but FP said she had made one such for youngest grandchild few years ago.

Between ages of 5 months and year, child "crawled around indoors," but if mother had work to do outside she tied baby in Y-shaped cradle (umbo-al), similar to Yokuts, Kitanemuk cradle (Kroeber, Handbook, 535, fig. 48d), save that length of stick below crotch shorter in Tübatulabal specimen. Forked branch of *Fremontia californica* Torrey (u'upul) peeled, used for frame (naši-la-waga-na'). One cradle (1-28570) measures 31 1/2 in. overall, 28 in. from crotch to top, has 10 crossbars lashed to frame with

[71]

1: Voegelin E-5 (1931-1933) 1938
NS22 Tübatulabal NS22

- 372 Fire drill. - Hearth (a-da-wa-yat) for fire-drill made from piece of dry cottonwood root (utu-lan wi-šin) from *Populus fremontii*; single hole in hearth; powder drained into channel leading to edge of hearth. Drill (a-da-wa-yišt) 2-2 1/2 ft. long, made from stalk of *Baccharis glutinosa* Pers. or *B. viminea* DC. Shredded cottonwood roots used for tinder.

- 413 Arrow straightener. - Arrow straightener (u-gišt) similar to Cahuilla straightener (Kroeber, Handbook, 530, pl. 49d); made from soft rock (steatite?; slate, FC), obtained near Chimney canyon in Tübatulabal area. Central groove (loho-wi-nil) and incised lines on top surface of straightener cut with flint knife.
- [171] 324 SM's straightener, duplicate of steatite specimen from s. San Joaquin valley (Gifford and Schenck, pl. 17c), 3 in. long, 1 1/2 in. wide, 1 1/2 in. high at center, 1 in. wide at ends; single transverse groove 1/2 in. deep cut across top center, dividing convex top surface into 2 halves. Series of diagonal parallel lines, incised to depth of 1/16 in., cover one of halves of top surface; on other half series of 11 short parallel ridges cut out in low relief; incised lines and serrated ridges used for same purpose as noted among Yokuts (Kroeber, Handbook, 530).
- [171] FC's straightener round, with 2 grooves; lacked incised lines, ridges; specimen 1-19802, 4 in. long, 1 1/2 in. high, has single groove, no lines; specimen 1-19803 is 4 in. long, 1/2 in. high, has 2 grooves; SM said some little individual variation in size, markings on straighteners, depending on man's preferences.

- 413 Netting shuttle. - No information obtainable; SM thought some variety of shuttle formerly used.
- 286

FIRE

- 221 In winter, small fire inside dwelling served for cooking, heating, and lighting house at night;
- 372 in summer, cooking fire often built outside under shade. Women also often cooked acorn mush at spot where they leached meal. During summer hand games played at night around fire, outside in open; brush enclosures illuminated at night by fire built in center; sweat house heated, illuminated by open fire. Shamans used small open fire during shooting contests. Torches used for hunting quail (p. 13), but not for lighting.
- [756]

- 372 Firemaking. - Fire made by men only, with simple hand drill (supra); man knelt (Kroeber, Handbook, 822, pl. 78); SM said it took from 15-20 minutes to make fire with drill, but this seems unlikely. In 19th century Tübatulabal learned to make fire from Mexicans by striking upper edges of 2 white quartz strike-a-lights (ki-lä-l) together (fig. 7a); "the Mexicans used one of these pieces of stone against a piece of
- 462
- 177

1: Voegelin E-5 (1931-1933) 1938
NS22 Tubatulabal NS22

177
● 372 steel, but we used the 2 pieces of stone and no
462 steel (SM). Quartz for these strike-a-lights
obtained from Koso Indians at Koso (FP).

[439]

313

Firewood. - Small trunks of willow (ha-l),
Salix laevigata Bebb., branches of Fresno tree
(a-wilib-l), Fraxinus oregana Nutt., stream
alder (pawisu-l), Alnus rhombifolia Nutt., and
dry oak used chiefly for firewood (kutuga't);
cottonwood (u-'ut, generic name for tree), "too
light" (SM). Firewood broken into 3 to 3 1/2-ft.
lengths for carrying in pack basket; women
packed on back loads of slightly longer lengths,
but "not too heavy" (FP); men brought in larger
pieces on shoulder.

[462]

482

GLUE, PITCH, AND ASPHALT

381

Glue. - Deer horns boiled in small amount of
water, in pot, to obtain glue (a-wadin pa-hn,
horn water); used to apply sinew backing to bows.

314

824

415

Pitch. - Several varieties pitch (sa-nun) used
for different purposes; pitch from Digger pine
applied to soles of moccasins to make them wear
longer (FP); pitch from bull pine smeared over
torches used in quail hunting. Basketry water
bottles made watertight by putting handful of
red earth of same variety used for face paint,
plus lump of piñon-pine pitch inside finished
bottle, together with quantity of heated pebbles
about size of person's thumb. Hot pebbles shaken
vigorously inside basket for 5-10 minutes, thus
causing pitch to melt, combine with red earth,
and coat inside of container. Hot melted pitch
also smeared over outside of bottle with small
stick; when it had cooled slightly red earth,
mixed with little water, was smeared on top and
mixed in with pitch coating. The red earth, used
in combination with the pitch, made water "taste
sweet"; if pitch alone used, water had "bitter"
taste.

Pitch or gum (ya-bul), obtained from grease-
wood, used to fill walnut-shell dice (FP).

317

[439]

574

Asphalt. - Lumps of asphalt brought into area
by the Indians from around Ventura, when the
latter came up for piñons. The Tubatulabal also
visited at Ventura, and one of the things they
brought back from the ocean was asphalt (SM).
This commodity used in variety of ways, some of
which were: to attach prong to shaft of harpoon,
to attach bone point to fish hook, to cement
foreshaft in cane mainshaft of arrow, and socket
arrowheads into foreshaft, to secure knife blade
in handle, to attach basket hopper to mortar.
Asphalt also used to smear over fishlines made
of native twine, and lumps of it served as knob
handles for bone, cactus spine awls. Asphalt was
softened by melting; often applied with small
stick. Gifford and Schenck (p. 53) also note
presence of asphalt beds on surface in hills SW

[P. 52a] Tubatulabal NS22

T
Y

534

known. The clapper (ta'wəl) and cocoon rattle (sa'nač) were used. The musical bow was known to the Southern Yokuts, Choinimni Yokuts, and probably northward throughout the foothills as it is reported from Western Mono, Miwok, and Maidu.¹³¹

T

Y

224

411

Hunting.---F.M.'s father was a fine hunter; Cougar was his dream helper. When F.M. was about fifteen years old, his father took him hunting. Sinew-backed bows were bought from Pitaniša (Tubatulabal) living near Kernville. But plain bows of elderwood (? he claimed) were made at Sototlo. Arrows were of button willow tipped with a white-oak point, or of obsidian if for deer.

T

Y

224

The deer disguise was made of the complete head, antlers, and skin. The head was stuffed with grass. The wearer leaned on two sticks to imitate the animal, and with them would crash about in underbrush to simulate fighting deer.

Bears were lured out of their caves by a fast runner, and shot by two or three good hunters waiting in ambush.

After the killing of an especially large deer or bear, the animal's head was sprinkled with eagle down. F.M. never heard of selling bear paws or skin to someone with a bear totem. He thinks bear was not a totem animal for any one at Sototlo.

T

Y

223

In dividing up a carcass, the man who took the skin did not receive any meat. Men did tanning of hides.

The pigeon booth from which birds were snared is probably native to this region, as well as northward along the foothills, although that seen and illustrated by Holmes was on the Tule River Reservation.¹³²

T

Y

276

Tobacco.---Tobacco (so'gon) was drunk with lime. The preparation was like that elsewhere: the cakes of dried leaves were pounded with a small mortar (kəl'was) and pestle (pa'lwī), crushed shells (ta'sap) were added, and water was stirred in. It was taken in the evening by persons of either sex who were at least twenty years of age; the purpose was to aid dreaming. Crushed tobacco was smoked in a cane pipe (ha'la) or an elderwood pipe (wi'se'ta, elderwood). Tobacco was made in the usual two cake forms, so'gon and politai'na, but of the latter F.M. could only say that it was stronger and molded in the usual cylindrical shape.

T

Y

372

Tinder.---Oak balls contained a shreddy, corklike substance called ye'ska, which was used as tinder in making fires and lighting pipes.

T

Y

278

757

Medicine.---Redwood sap (ta'nal) was shaved up in a pot of hot water. A person with a wound which bled profusely steamed himself with this under a blanket; a woman who had given birth also used it in this way. A little of

¹³¹Ibid., 419, 542; Barrett and Gifford, 250; Lehoucq Western Mono, herein, Pt. II.

¹³²Anthropological Studies, pls. 31, 32.